

Dear FCC Commissioner:

I am writing to you today because I am concern over Dockets 03-104 and 04-37 regarding BPL (Broadband over Power Line). To transmit broadband information over present power lines may sound like great idea since it would not require any significant infrastructure changes or additions. This is only the surface. As the old saying goes, "you can't get something for nothing." BPL is no exception. BPL uses modulated broadband signals and uses the power lines as the medium for transmission. Although it is said that BPL is within the Part 15 rules, the situation is much more complex.

When the Part 15 rules were written years ago, broadband transmission was not considered. Basically 20+ years ago, virtually all transmissions were single carrier, narrowband. Part 15 rules stated that the unlicensed carried had to be below a certain limit to minimize interference. This limit varied from band to band. A typical number would be 10,000 uV at 1 meter. With a single carrier, that may not amount to much. However, with a broadband transmission of perhaps 5 MHz wide, the energy contained in that carrier is many magnitudes greater. Yet at any single frequency it would still be within the Part 15 rules.

Part 15 devices, such as light dimmer switches, cause havoc to my AM radio and TV which are amplitude modulated. My ham radio is not even usable when a cheap light dimmer switch is on in the house.

With BPL, AM radio will change as we know it today. No longer will one be able to use them inside a house with the BPL signal being carried by the 110 VAC power lines. All you would hear is a buzz.

Clearly, a more long term solution is fiber optics to the last mile and then have a transceiving node such as 802.11g as the final link. This is already being implemented in most major cities (most commonly known as a "hot spot") with great success. The data rates are much faster, it is wireless, it causes minimum interference to critical AM broadcast, commercial, and amateur radio (emergency communications). This initial investment will reap benefits for generations to come. However, BPL will be letting the genie out of the bottle.

I trust that you will seriously consider my inputs.

Sincerely,

Gary Fong, N1GF

